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Parent Policy: Health, Safety, and Environment Policy

Environmental Management Procedure

Office of Administrative Responsibility:	Health, Safety and Environment
Approver:	Director, Health, Safety and Environment
Scope:	Compliance with this university policy extends to all academic staff, administrators, colleagues and support staff as outlined and defined in the Recruitment Policy (Appendix A and Appendix B: Definitions and Categories). Undergraduate, graduate, and Faculty of Extension students; postdoctoral fellows; emeriti members of the Board of Governors; visitors to campus, including visiting speakers and scholars; third party contractors; and volunteers.

Overview

The University of Alberta (U of A) is committed to conducting all activities related to work, research or learning in an environmentally responsible manner. To achieve this goal and to fulfill legislative requirements, all unit(s) must take measures to prevent or minimize all environmental harm through the identification of environmental aspects and mitigation of environmental impacts.

Purpose

The purpose of this procedure is to describe how **senior administrators**, supervisors, staff, and students can meet their legislated environmental management responsibilities through the following:

- Identification of environmental aspects
- Mitigation of environmental impacts
- Implementation of approved monitoring, disposal, and reporting practices

Senior administrators are also responsible to oversee and enable environmental management strategies, including the provision of resources and equipment for hazard mitigation as required.

Procedure

1. Identify and Assess Hazards

Prior to conducting any activities related to work, research, or learning at or on behalf of the U of A, supervisors should work with their staff or students to identify all environmental aspects, potential and actual environmental impacts, and the severity, magnitude, and duration of each impact.

Take into consideration:

- Accidental spills or releases of hazardous materials, including hazardous discharges to air, land or water
- Hazardous waste generation
- Operation and maintenance of equipment containing hazardous materials including storage tanks, cylinders, fire suppression systems, etc.
- Application of pesticide and herbicide

Health, Safety and Environment (HSE) has developed tools to assist supervisors with the hazard assessment process, including:

- e-Compliance Hazard Assessment Tool
- Field Activities Plan

2. Develop and Implement Mitigation/Control Strategies

Following hazard identification and assessment, supervisors, staff, and students should develop and implement control strategies to mitigate environmental impacts and to align with applicable legislation, regulations, and codes of practice. Consider these control strategies:

1. Engineering controls
 - a. Workplace equipment design to prevent releases to air, land, and water
 - b. Secondary containment**
2. Administrative controls
 - a. Environmental approvals, permits, and licences
 - b. Leases and contracts (outlining requirements and restrictions for land and property use, etc.)
 - iii. Procedures, Standard Operating Procedures (SOPs), checklists, and inspections
 - c. Handling and storage of hazardous materials
 - d. Monitoring practices:
 - Visual inspections

- Fire safety inspections
 - Monitoring and recording data
- e. Disposal practices
 - Hazardous Materials Disposal Program (Chematix)
- f. Reporting practices
 - Incident reporting through the HSE Incident Reporting Portal
 - Release reporting to Alberta Environment and Protected Areas
 - Annual reporting to Alberta Environment and Protected Areas
- g. Training: Employees responsible for transporting, storing or handling hazardous materials must complete appropriate training as identified in the hazard assessment, including the following:
 - Transportation of Dangerous Goods
 - WHMIS
 - Supervisor Health, Safety and Environment Professional Development Program (for supervisors)
 - Hazardous Waste Management
- h. Emergency Response Plan: Employees must have access to an emergency response plan to mitigate the impact of an environmental aspect. The emergency response plan must be:
 - Documented in the unit emergency plan
 - Reviewed on a regular basis
 - Tested (e.g., run through the response to ensure awareness of procedures)
- i. Documentation: The following documentation must be maintained in accordance with the U of A's Records Management Policy:
 - Incident reports
 - Annual reports and all data collected for the site including Phase I, II, and III Environmental Site Assessment Reports to AEP
 - Inspections
 - Training records
 - Emergency response plan
 - Data resulting from monitoring and recording

For advice or guidance on environmental hazards and controls contact hse.info@ualberta.ca.

Definitions

Any definitions listed in the following table apply to this document only with no implied or intended institution-wide use.

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Unit	A designation used to denote academic and non-academic departments, faculties, schools, institutes, and centres at the University of Alberta
Environmental aspects ISO 14001-2015	An element or characteristic of an activity, product, or service that interacts or can interact with the environment. Environmental aspects can cause environmental impacts. They can have either beneficial or adverse impacts and can have a direct and decisive impact on the environment or contribute only partially or indirectly to a larger environmental change.
Environmental impacts ISO 14001-2015	A change to the environment that is caused either partly or entirely by one or more environmental aspects. An environmental aspect can have either a direct and decisive impact on the environment or contribute only partially or indirectly to a larger environmental change. In addition, it can have either a beneficial environmental impact or an adverse environmental impact.
Senior administrators	President, Provost, Vice-President, Vice-Provost, Deputy Provost, Associate Vice-President, Dean, General Manager, Chief of Staff, Chair, Director
Secondary containment	A control measure placed on or built around a storage vessel to prevent its contents from flowing onto the ground or into a drainage system during a spill or discharge. The design and complexity of the system used to create this enclosure will depend on the state of the content in store; flammable, corrosive and hazardous products require strict regulations when designing this type of a barrier. Generally, it is used to prevent any fluid in storage from leaving the area in which it is contained so that it does not corrode or pollute the adjacent environment.
Emergency response plan	A written document for a workplace that includes the following: Procedures for dealing with identified emergencies, the identification of location of and operational procedures for emergency equipment, emergency response training requirements, the location and use of emergency equipment (including spill kits specific to chemical or biological hazards in use), emergency facilities, the fire protection requirements, the alarm and emergency communication requirements, first aid services required, procedures

	for rescue and evacuation, the workers designated for rescue and evacuation workers.
Phase I Environmental Site Assessment Report	<p>An evaluation of the current and historical land use to assess whether the site may be subject to potential or actual contaminants of potential concern. It is typically comprised of the following four steps:</p> <ul style="list-style-type: none"> ● Gathering information about past and present uses of the site ● Site visit ● Reviewing environmental files maintained by the site owner and regulatory agencies ● Preparing a report that identifies existing and potential sources of contamination on the property.
Phase II Environmental Site Assessment Report	<p>An investigation focused on gathering physical data to determine the nature and extent of contaminants of potential concern. Data collected must be compared to the appropriate environmental guidelines. It can include the following tasks:</p> <ol style="list-style-type: none"> 1. Surface and subsurface soil sampling, groundwater and surface water sampling, soil vapour sampling (along with laboratory analysis), sediment sampling, collection of plant or aquatic species samples 2. Above/underground storage tank content and tightness testing, asbestos containing material sampling, PCB sampling and identification, geomagnetic or geophysical surveys 3. Directly measuring conditions such as noise levels or radiation 4. Using environmental fate or transportation models to evaluate the potential migration of the contamination 5. Conceptual modeling
Phase III Environmental Site Assessment Report	<p>The development and execution of a site remediation and/or risk management plan. Could include the following tasks:</p> <ol style="list-style-type: none"> 1. Development and execution of a work plan for site cleanup 2. Additional site monitoring 3. Interim or final reports 4. Application for Reclamation Certificate

Related Links

Regulatory/legislation

- Alberta Environmental Protection and Enhancement Act
<https://open.alberta.ca/publications/e12>
- Canadian Environmental Protection Act
<https://laws-lois.justice.gc.ca/eng/acts/C-15.31/index.html>
- Fisheries Act <https://laws-lois.justice.gc.ca/eng/acts/F-14/index.html>
- Migratory Birds Convention Act
<https://laws-lois.justice.gc.ca/eng/acts/M-7.01/index.html>
- Species at Risk Act <https://laws.justice.gc.ca/eng/acts/S-15.3/>
- Canada Wildlife Act <https://laws-lois.justice.gc.ca/eng/acts/W-9/index.html>
- Canadian Wildlife Services
<https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/canadian-wildlife-service-contact-information.html>
- City of Edmonton Drainage Use Bylaw
<https://www.edmonton.ca/documents/Bylaws/C18093.pdf>
- Alberta Environment and Protected Areas
<https://www.alberta.ca/environment-and-protected-areas.aspx>
- Department of Fisheries and Oceans <https://www.dfo-mpo.gc.ca/index-eng.htm>
- Environment and Climate Change Canada
<https://www.canada.ca/en/environment-climate-change.html>
- Transportation of Dangerous Goods Program
<https://www.tc.gc.ca/eng/tdg/safety-menu.htm>

Other links

- Hazardous Management Assignment of Accountability
<https://policiesonline.ualberta.ca/PoliciesProcedures/Policies/08.0%20Environmental-Management-AoA.pdf>
- HSE website
<https://www.ualberta.ca/vice-president-finance/environment-health-and-safety/index.html>
- University of Alberta Hazardous Materials Disposal Program (Chematix)
<https://www.ualberta.ca/human-resources-health-safety-environment/environment-and-safety/lab-safety-and-management/set-up-a-lab/dispose-of-hazardous-waste/index.html>

- e-Compliance Hazard Assessment
<https://www.ualberta.ca/human-resources-health-safety-environment/environment-and-safety/self-help/hazard-assessment-web-application.html>
- Field Research Pre-Planning Field Activities Plan:
<https://www.ualberta.ca/human-resources-health-safety-environment/environment-and-safety/field-research-office/fieldresearchpreplanning/index.html>
- Emergency response plan creation form:
https://docs.google.com/forms/d/e/1FAIpQLSdogaFo7ggoE_ROqJVqNlzidaf6l_5eN2PsH2CiX6Bbe5e3MQ/viewform
- Health, Safety and Environment incident reporting portal:
<https://www.ualberta.ca/human-resources-health-safety-environment/environment-and-safety/report-an-incident/index.html>

If any of the links are broken, please contact uappol@ualberta.ca

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